



WILL SMART CITY NOTION BECOME AUTHENTIC: WITH SPECIAL REFERENCE TO MYSURU CITY

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ABSTRACT

Smart city is an internationally booming phenomenon. The concept of “Smart City” is been used widely across the globe with different nomenclatures meanings & contexts. A smart city has to be well outlined so that it provides the cost effective services, a good environment, and well-versed technological services for the welfare of the citizens of the nation. Smart city is a very important concept for the development of any nation. It is extremely essential for administration of India to offer well-informed urban communities in different states as a piece of financial advancement. In view of the escalated investigation of exhibit writing surveys from different healing territories, we recognize eight basic components of shrewd city activity: "administration and association, innovation, administration, arrangement setting, individuals and networks, economy, manufactured framework, and common habitat". The basic role of this examination paper is to comprehend the reasons why city passed up a major opportunity of the brilliant city transport even in the wake of being the cleanest city. The examination depends on optional information that has been gathered from different newspaper articles, books, and journals. Through this investigation, the investigator plans to comprehend the difficulties that stops Mysuru in getting a "Smart City" tag.

Keywords: Smart Systematization, Smart Sustenance, Smart Dynamics, Parameters for A “Smart City”

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INTRODUCTION

A city is an accomplishment of social, economic and environmental impact and a resilient habitat for existing population without conciliating future generations' experience. "Cities plays a conventional role in socio-economic aspects globally, and has a prominent impact on the environment- (Christodoulou, 2012)". Now "Smart Cities" are catchy lines, where cities all over the world are looking for various idea by which they can use advanced technologies. Technological and administrative groups and individuals are discovering innovative ways to blend smart technology into people's everyday lives. "(Harrison et al., 2010) in an IBM corporate document, stated that the term "smart city" denotes an "instrumented, interconnected and intelligent city". "Smart cities compared with regular cities where they are significantly more beneficial to the citizens and the government".

Citizens create smart cities by participating in shaping the city and thus the city can adapt to their needs. Smart cities work on elucidating things like- strengthening the quality of life, improving the environment, innovations, entrepreneurship, international work, educating people, public awareness, citizens participation in decision- making, government transparency etc. "The performance of these initiatives can be measured in terms of their environmental, economic and social benefits (Ahvenniemi et al., 2017)".

The focus is on the lives of citizens, their culture, health, safety, housing, social adherence. The idea of an Ideal Smart City is to enjoy a healthy and pleasant life, reliable transport and safety of housing and work. Until last year, Mysuru was the country's "cleanest" city. It has currently emerged as a yoga capital, with the curious foreigners thronging to explore the various histories that lies within the city. Mysuru is often termed as retired life paradise. In spite of constant exhibition of immense potential, the city was still not regarded as a "Smart City". The paper scrutinizes the various reasons why Mysuru was not considered for a "Smart City" and which are the areas for improvements.

OBJECTIVES OF THE STUDY

- To understand the reasons why Mysore couldn't make it into smart city list
- To analyse the various steps taken by MCC to make it into the second phase of "Smart City" Project.

CONCEPTUALIZING SMART CITIES

"Smart cities uses various admonitions and technologies to be more agile and efficient in the use of resources, resulting in energy and cost savings, enhanced services and quality of life, and reduced environmental footprint all supporting novelty and the "low-carbon" economy - Boyd Cohen (2014)". A smart city uses exhortation and modern technologies to increase viability, share the information with the public, improve the quality of services lended by the government and ensuring prosperity of the citizens. While the exact definition varies depending on whom we converse to, the encompassing aim of a smart city is to optimize city functions and drive economic growth while improving quality of life for its citizens using smart technology and data substantiation.

CRITERIA FOR SELECTION

Criteria for selection of potential smart cities are:

- "Existing Service Levels: This includes Increase in service levels over Census 2011, An operational Online Grievance Redressal System, Publication of at least first monthly e-newsletter and online publication of municipal budget expenditure details for the last two financial years on website".

- “Institutional Systems and Capacities: This covers imposition of penalties for delays in service delivery and improvement in internal resource generation over the last three years”.
- “Self-financing: This would be reflected in payment of salaries by urban local bodies up to last month, Auditing of accounts up to FY 2012-13, Contribution of internal revenues to the Budget for 2014-15 and Percentage of establishment and maintenance cost of water supply met through user charges during 2014-15”.
- “Past track record: Percentage of JNNURM projects completed which were sanctioned till 2012, Percentage of City level reforms achieved under JNNURM and extent of capital expenditure met from internal resources”.

CITY LEVEL EVALUATION

- “Credibility of implementation : This encompasses improvement in operational efficiency over the last three years as reflected in average time taken to give building plan approvals, increase in property tax assessment and collection, collection of user charges for water, improvement in power supply, easing of traffic congestion, online accessing of statutory documents through adoption of IT etc.”.
- “City Vision and Strategy : As reflected in the degree of correlation with the needs and aspirations of the residents, use of ICT to improve public service delivery, impact on core economic activity and inclusiveness”.

PROPOSAL LEVEL EVALUATION

- “Impact of proposal : To what extent the proposal is inclusive in terms of benefits to the poor and disadvantaged, Extent of employment generation, Articulation of quantifiable outcomes based on citizen consultations, Impact on environment etc.”.
- “Cost effectiveness of Smart City Plan : Application of smart solutions for doing more with less of resources, Alternatives considered to enhance cost effectiveness of the proposal, firming up of resources required from various sources, Provision for Operation & Maintenance Costs, IT interventions to improve public service delivery”.
- “Innovation and Scalability: Extent of adoption of best practices in consultation with citizens, Applicability of project to the entire city, Adoption of smart solutions and Pan-city developments”.
- “Processes followed : Extent of citizen consultations, vulnerable sections like the differently abled, children, elderly etc., ward committees and area sabhas and important citizen groups, Extent of use of social media and mobile governance during citizen consultations and Accommodation of contrary voices in the strategy and planning”.

SMART CITY FEATURES

“Planning for impromptu areas, Refining housing opportunities, Creation places which can be apt for jogging and with a lot of trees reduce air pollution, substantial use resources, boosting the local economy which will lead to synergy and improve the security, Developing open space- parks, playground, Stimulating eco-balance and augmenting quality of life, Promoting transport system and enhancing transport connectivity’s throughout the cities, Making cities governance friendly and cost effective increasing online services, Introducing new mobile alerts for municipal programmes, Giving an identity to city-economic activity, spruce up health education, culture, sports etc., Smart solution and infrastructure services-making area less exposed to contingencies using fewer resources, providing services of less cost”.

RESEARCH METHODOLOGY

This current study has been exploratory in nature where appropriate information were gathered from various secondary sources of data, such as, journals, books, websites, reports, database etc.

LITERATURE REVIEW

- Chourabi et al., (2012) jointly conducted a research on the title “Understanding Smart Cities: An Integrative Framework”. The paper defines smart city as making a town "smart" is rising as a technique to mitigate the issues generated by the urban increase and speedy urbanization. The paper proposes a framework to know the thought of good cities. The paper also supports the exploration of a tendency to determine eight crucial factors of good town initiatives: management and organization, technology, governance, policy context, folks and communities, economy, designed infrastructure, and natural surroundings.
- Somayya Madakam & R. Ramaswamy (2013) did a research on “The State of Art: Smart Cities in India: A Literature Review Report”. The paper discovers the sensible urban areas must be short listed as property “Administration Activity Asset Devices” for urban communities. Sensible urban areas is that the most recent idea once it includes building the urban areas of the more extended term. Sensible urban communities are relied upon to be the way to joining property future with proceeding financial process and occupation creation.
- M. Batty et al., (2012) did a study on the “Smart cities of the future”. The paper goes through tendency to first sketching vision shaping seven goals that “concerns with developing a brand new understanding of urban issues, effective and possible ways in which to coordinate urban technologies, models and strategies for mistreatment urban information across spatial and temporal scales, developing new technologies for communication and dissemination, developing new kinds of urban governance and organization, shaping essential problems regarding cities, transport, and energy, and characteristic risk, uncertainty and hazards within the good town”.
- ZaheerAllam & Peter Newman (2018) conducted a study on “Redefining the Smart City: Culture, Metabolism and Governance”. This paper investigates on the character, difficulties, and chances of good urban communities. A substitution decent urban areas system has arranged bolstered the size of culture, digestion, and administration. These discoveries acquire to tell arrangement producers of a substitute perspective on the great town worldview, which centers on urban results rather than innovation in disengagement.
- Rama Krishna et al., (2017) studies on “How do we understand smart cities? An evolutionary perspective”. The paper tries to understand “Smart City” how its communities can bring positive social correction by the reception of “ICTs”, advanced administration and human capital among the gathering, adversaries indicate in regards to the negative impacts and holes exist in their concocting and execution. The paper bunches the varying perspectives concerning the working of good urban areas and, along these lines, proposes a 3RC system, comprising of Reflective, Restrictive, Philosophical hypothesis and huge resources, that fundamentally examinations various stages inside the improvement of the circle. The general point of the paper is to know about great urban communities take issue in their implications, expectations and 'contributions'.
- Trevor&Shah (2018) conducted anexploratory study on the title “Security and privacy challenges in smart cities”. The paper mainly focuses on the construction of good cities that can bring forth a better quality of life to the plenty through digital interconnectivity, resulting in accrued potency and accessibility in cities. Good cities should guarantee individual privacy and security to confirm that its voters can participate. The challenges embrace privacy preservation with high dimensional knowledge, securing a network with an oversized attack

surface, establishing trustworthy knowledge sharing practices, properly utilizing computing, and mitigating failures cascading through the good network.

- Hall, R.E et al., (2008) conducted a study on the survey “The vision of a smart city”. The papers expresses the vision of "Smart City" is that the city of the more extended term, made protected and secure condition close by monetary development which because everything being equal - regardless of whether for power, water, transportation, and so forth territory unit planned, made and kept up making utilization of cutting edge, incorporated materials, sensors, physical science, and systems that region unit interfaced with mechanized frameworks involved databases, following, and basic leadership designs.
- Giffinger et al., (2010) conducted a research on the “Smart cities ranking: an effective instrument for the positioning of the cities?” The paper scrutinizes various reasons why the urban communities are increasingly tested to support their forcefulness. Altogether different vital endeavors are made references in structuring sciences, new methodologies and instruments are intricate and connected, directing the situating of urban communities amid an aggressive urban world. There is some proof that open consideration of town rankings is particularly centered just on to position themselves altogether disregarding its which implies as partner in nursing instrument for vital structuring. To expand the potential which methods for rankings the paper offers a layout of different assortments.

ANALYSIS AND INTERPRETATION

REASONS FOR NOT MAKING WAY TO THE SMART CITY LIST

When we explore through the archives we can see that Mysuru was one of the top contenders to make it into the smart city list back in 2017. When the Modi Governemt came into power it was a great vaccum that stood ahead of India. Most of the citizens were not fully aware about the notion in those days. Mysuru was always lauded as a paradise which carried high prominence, history and a rich heritage. While critiquing an article which was published The Hindu it was found out that :

- It was found that “MCC” (“Mysore City Corporation “) did not audit its accounts appropriately after the year 2011.
- It was found that 80 per cent of funds under “Jawaharlal Nehru National Urban Renewal Mission” (JNNURM) was not used scrupulously. In case if the city had used funds under “JNNURM” wisely the city would have scored an extra, 10 points which would have helped improve its overall score
- The potential reason that denied Mysore its smart city privilege was that it surpassed the population limit, which was between 5 – 10 Lakhs that was parametric for being considered as a smart city.

TRANSITION FROM 2017 TO 2018

After being a denied, the place in First phase of smart city plan Mysuru has shown drastic change in all angles. The city clinched the “Cleanest city” title twice. The transportation system, solid waste management, water supply are the areas in which the city excelled. Some of the changes which was adopted by the city were

- The government made a substantial move by unveiling various new health policies, which covers almost all diseases.
- The government is also trying to implement solar power throughout the city which will be a great stride forward as most of the cities in India haven’t been able to do this.
- The “MCC” plans big as it wants segregate debris effectively from its source for “Solid waste management”.

- The city also introduced “intelligent traffic” signals to replace “fixed-time” lights as it makes things smoother and easier.
- The city bought a very innovative concept of hiring a cycle and returning it to its station, which was later followed by Bhopal.
- Thirty-two Railway stations, which falls under Mysuru Division, were provided Wi-Fi as part of Digital India.
- As a part of CSR activities in and around the city, Smart class facilities was provided for children’s in rural area.

MAJOR BENCHMARKS MADE BY THE CITY

TABLE 1

Water Supply Indicators																		
	Coverage of water supply Connections		Per capita supply of water		Extent of metering of water connections		Extent of non revenue water		Continuity of water supply		Quality of water supplied		Efficiency in redressal of customer complaints		Cost recovery in water supply services		Efficiency in collection of water supply-related charges	
Benchmarks	100%		135 lpcd		100%		20%		24 hours		100%		80%		100%		90%	
	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)
	100%	100%	135	135	95%	95%	25%	20%	6	8	100%	100%	75%	80%	50%	55%	75%	80%
Sewage Management (Sewerage and Sanitation)																		
	Coverage of toilets		Coverage of sewage network services		Collection efficiency of the sewage network		Adequacy of sewage treatment capacity		Quality of sewage treatment		Extent of reuse and recycling of treated sewage		Efficiency in redressal of customer complaints		Extent of cost recovery in sewage management		Efficiency in collection of sewage charges	
Benchmarks	100%		100%		100%		100%		100%		20%		80%		100%		90%	
	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)
	100%	100%	98%	100%	90%	92%	100%	100%	95%	100%	5%	8%	80%	85%	90%	95%	75%	80%
Solid Waste Management Indicators																		
	Household level coverage of solid waste management services		Efficiency of collection of municipal solid waste		Extent of segregation of municipal solid waste		Extent of municipal solid waste recovered		Extent of scientific disposal of municipal solid waste		Efficiency in redressal of customer complaints		Extent of cost recovery in SWM services		Efficiency in collection of SWM charges			
Benchmarks	100%		100%		100%		80%		100%		80%		100%		90%			
	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)	Current (2016-17)	Targets (2017-18)		
	100%	100%	95%	98%	35%	50%	40%	50%	25%	30%	96%	97%	25%	25%	50%	60%		
Storm Water Drainage Indicators																		
	Coverage of storm water drainage network								Incidence of water logging/ flooding								Commissioner Mysuru City Corporation Mysuru	
Benchmarks	100%								0									
	Current (2016-17)				Targets (2017-18)				Current (2016-17)				Targets (2017-18)					
	95%				95%				0				0					

From the above Table 1 it can be found that the city has made major improvements in areas like sewage management, solid waste control, storm water drainage and water supply. It can be seen that year by year the city is adopting corrective measures. Mysuru city has crossed its benchmarking for the target year “2017-18”.

What are the major technology adopted by the city?

The city has made many radical changes after the first phase of smart city project throughout India. Few of them are:

- Mysuru is the first city in nation to introduce smart cards for tourists, which will facilitate their visits to various spots in the city.
- The City Police has initiated in installing Smart Variable Messaging Signs (VMS) at three places in the city to give traffic-related information about routes, which will ensure an easy

traffic movement. These signboards will provide a real-time information about the lap of the traffic and suggests surrogate routes with minimum traffic abundance to road users.

- “Chamudeshwari Electricity Supply Company” (CESC) will expand project to entire city. “CESC” has been supplying electricity to around 25,000 people with the completion of first phase. There are plans to supply electricity to entire Mysuru city by expanding the project, which is being planned at a cost Rs. 400 crore, jointly by Central and State Governments and various other electricity supply companies.
- A youth from Mysuru city developed an instrument named “Smart Card”. Smart card carries health details of the patient and contains health details of the holder, which will be helpful for both the patient and doctor for adequate medication.
- Mysuru has already achieved the epithets like “Heritage City, Cultural Capital, Yoga City and Clean City”. Adding to the list is the nickname Statue City, thanks to many statues that adorn various parts of the city.

HIGHLIGHTS OF MYSURU BUDGET 2017-18

The size of the proposed Budget was Rs.712.54 crore, with an opening balance of Rs. 147.48 crore. The Budget expected a revenue of Rs. 565.05 crore as against an expenditure of Rs.705.47 crore, leaving the MCC with a surplus of Rs.7.07 crore. Some of the major highlights of the budgets are depicted below:

TABLE 2

Sl.No	Factors	Amount
1	For the improvement of hundreds parks of the four hundreds parks in the city under Green City, venture under the Social Forestry.	“Rs.20.01 crore”
2	Income anticipated from building permit expense, ground lease, burrowing charge, upkeep charge, review expense, water association expense, issuance of fruition reports, fine and punishment, underground waste expense and other arrangement expenses.	“Rs.9.825 crore”
3	Income anticipated that would be created from exchange permit charge.	“Rs.5 crore”
4	Rents of the business buildings and markets having a place with the MCC and Garuda Mall ground lease.	“Rs.3.71 crore”
5	Amount kept aside for efficient traffic management, the city corporation has reserved a sum which to be given to the Police division.	“Rs.100 crore”
6	Present day HDPE sewer vents will supplant the current sewer vents and twofold divider folded HDPE funnels will supplant the current channels.	“Rs. 39 crore”
7	A proposal for construction New Sports Club built for the Corporators, admirals and numerous employees to loosen up and unwind from their feverish timetable.	“Rs. 2 crore”

Table 2 shows the highlights of budget proposed by MCC in the FY 2017-18. If these amounts are utilized efficiently and for the betterment of the city, we can see a radical change in the infrastructure, roads, transportation of the city.

WHAT ARE THE MAJOR AMELIORATION'S THAT MYSORE CITY SHOULD ADOPT

- Rail connectivity: The current railroad framework must be remodelled. It can be seen that it takes more than two hours to reach Bangalore if we take a train. This has to be revised by implementing electrification; two-fold covering of Bengaluru-Mysuru line as a whole and trains has to be speeded up.
- **More Highways:** Consummation of four-path Bengaluru-Mysuru Highway back in the year 2004 saw that hike in development of city. Roads create connectivity's between two or more state. Therefore, roads play a pre-dominant role in betterment of a city.
- **“UDAN Scheme”:** Air network has dependably been our greatest failure yet because of the “UDAN” plot by the central government; we currently have every day flights that are rising to full limit. Central government has to fund the state government adequately in order to ensure the reasonable growth in these areas.
- Infosys in Mysuru: Infosys will endeavor towards making its Mysore grounds a “Smart City” through successful and productive arranging and guarantee that proficient asset administration and utilization have taken. The Mysuru campus will be the first to achieve zero waste to landfill sustainability.
- Entrepreneurs were also affected by the absence of talented and restrained employees. So various sectors should join their hands together to provide needed workforce for each other.

FINDINGS

It has been instigated that Mysuru has all the essential accoutrements, but still has not made it to the smart city list. The various reasons for the downfall in “Phase 1” was clear mismanagement, under usage of funds and improper accounts maintenance. The city needs to operate prudently in order to accomplish this goal. Arduous traffic within the city is a major problem alongside lack of proper infrastructural facilities. The city has shown its full-fledged growth in Tourism areas. Population is another component that halts the city's growth. The government has to check all these sides and come up with an apt solution.

SUGGESTIONS

- As there are 2 lakes in Mysore – “Karanji lake” and “Kukkarahali lake”, efforts should be put for the maintenance of the lakes to make them world-class regarding purity of water, and not allowing hazards and deleterious inflow of materials. Other lakes within Mysore should not be allowed to become areas for real estate development. They can be an additional attraction, which enhances the beauty of the city.
- Another wonderful development made by the Mysore city corporation is the development of a big swimming pool, yoga centre, auditorium with a big stage for cultural activities and a huge walk area inside a park. This can become inspiration and example. In addition, many more such developments have been made within the city.
- It is necessary to have a metro rail as the population of Mysore including the outreach extensions come up to 1.5 million and within a span of 4-5 years, they may go up to 2 million. Thus proper planning has to be made for the development of metro lanes by taking the view of academic engineers, social networks, politician designs, media etc.
- As Mysore was ranked as the cleanest city of the country and they have missed the smart city bus, it is essential to work upon where they have lost it and why. Aimed to get new ideas and work on it and come up with new idea of water line, sewage disposal, traffic problems, electric lines, upkeep roads. Here citizen participation is equally important.

- As the population in Mysore is increasing, people tend to use more vehicle and the traffic is increasing. Thus, traffic management is another issue to be tackled. It is necessary to go for underpasses and possible flyover in certain areas. Proper planning has to be made.
- For the orderly development of city, air connectivity to and from Mysore is important. This will give a boost to business activities.

CONCLUSION

Introducing the prospect of “Smart City” in India could be a pleasant arrangement by which expanding monetary condition rate, absence of framework and essential comforts, the urban areas may need to confront stacks of difficulties. Prior to starting this proposition, the administration needs to try to go to the major issues inside the state like actualizing a right framework, giving sensible water sanitation and medicinal services offices and so forth.

Mysuru is quite popular for its rich legacy and folklore. In the city, we have seen the entry of numerous new work producing businesses in recent years and we are very nearly checking the network difficulty that has for since quite a while ago hindered the country's development. The colossal national spotlight is on "Make in India" guarantees to make India at its statistic high ground in terms of industrial facility and Mysuru has floated to get a tolerable gradual addition of this. The tourism sector is exhibiting sound development, which is quick rising. Subsequently, the development of this city is sure however, occupants of the city has to devote themselves to guarantee that it will be an arranged and maintainable development. The greatest test, which the "Mysuru city corporation" needs to go up against, will assemble comprehensive perceptive city for every one of its inhabitants, paying little respect to whether they are affluent or destitute. A suave city would concertize the fantasy of each mysurian to live in an improved urban city. There will be cleaner boulevards as well as cutting edge open transport and other very much engaged infrastructural offices. The enormous test that lies ahead will be to make self-continuing urban communities, which makes sufficient openings for employments, utilize assets wisely and pining for individuals.

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